

Providing a Stable Supply of Products Worldwide

Delivering products using human discernment and advanced technology

Osamu Ohno

Corporate Officer and Senior General Manager,
Production & Purchasing Division



Our primary mission is to deliver a customer's desired product, at the desired time. We must continually and quickly supply the latest products without any interruption. In order to accomplish this, it is necessary to secure stable procurement routes amid a global shortage of resources, and create a network for the steady gathering of high quality parts and materials. If even one part is missing, a product cannot be completed and delivered. Reliability is the key to procurement, while speed is paramount for production. In rapidly changing markets such as the market for digital cameras, a product that takes three months to manufacture can be out of date by the time it hits the store shelves, due to changes in competing models. To stay one step ahead, we use rapid production mechanisms capable of manufacturing products as soon as they are ordered.

At the Production & Purchasing Division, we are in charge of an extensive supply chain for delivering products to customers, and we also have a great responsibility to ensure Casio's profitability. This is because supply chain efficiency directly impacts the bottom line. In particular, the accumulation of unshipped products can lead to price reductions, which results in a direct loss of income. Using IT, the entire procurement, production and logistics systems are integrated and carefully controlled, in order to prevent the accumulation of inventory, and to ensure efficient and timely product delivery.

As an organization that provides a support framework for product creation, the Production & Purchasing Division will continue to make daily improvements. We are proud of our role in the continual delivery of Casio products to people around the world.

Social and Environmental Initiatives in the Area of Procurement

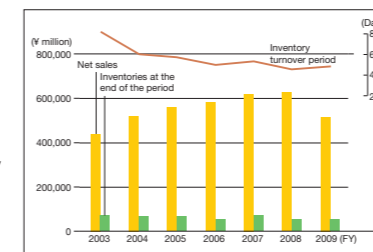
Casio has established Procurement Policies calling for fair, equitable transactions, and they cover a broad range of social and environmental issues such as human rights, labor conditions, safety, health, the environment, and information security. The company works with suppliers to obtain their understanding and support for these policies. In fiscal 2009, briefings on the Procurement Policies were again held in Southern China and Thailand. A second CSR questionnaire was also given to suppliers in Japan. The questionnaire results were provided as feedback to all the suppliers, and Casio worked to further improve the level of CSR procurement.

In order to completely prevent the procurement of product parts or materials containing substances that are harmful to the environment, Casio has established procurement standards that incorporate relevant laws worldwide, based on chemical substance regulations in countries to which Casio products are exported. Green procurement is promoted by providing suppliers with these standards, ensuring that they all know about restrictions on the use of specified chemicals, and asking them to submit detailed information on their products. At the end of fiscal 2009, the standards were updated to create a sixth edition, in order to incorporate measures for compliance with the EU REACH regulation, as well as a revised list of substances prohibited for use in products.

Supply Network Responds Quickly to Changes in Demand

In order to secure a steady supply of key components such as semiconductors and display devices, Casio maintains stable, long-term purchasing relationships. However, market demand is not always steady, and demand for some products is concentrated in short periods of time. To address this situation, production and sales teams at Casio work together to provide a stable supply of products while carefully adjusting for changes in demand.

Production sites carry out simulations based on sales plans provided by the sales department, and calculate the personnel and equipment levels needed for production, before making the necessary arrangements. The materials procurement department adjusts the procurement quantities every week by looking at information on materials to be received, and models needed by the sales department. The computerized Supply Chain Management System (SCM System) coordinates the entire process from material procurement to production, distribution and sales, supplying the optimal quantities with speed and efficiency. By strengthening cooperation over the entire network, and responding quickly to changes in the market, Casio is working to realize compact and flexible production that enables rapid production changeover to different models, without losing any quality or efficiency.

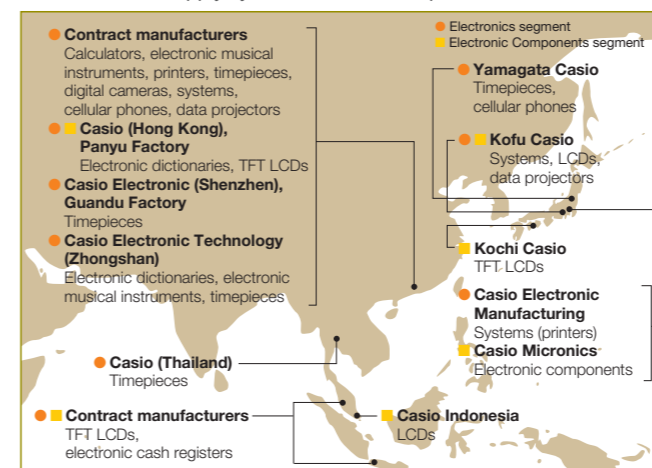


Optimal Production Locations and Diversified Risk

Production sites around the world vary in terms of technical capabilities, proximity to major markets, ease of part procurement, and labor costs. Making the most of its knowledge of these factors, Casio optimizes production locations by assigning manufacturing to different plants based on product characteristics.

In order to prevent any interruption in supply due to unforeseen circumstances, two separate production sites are maintained for every Casio product.

Production and supply systems for individual products



Casio Group Production Technology

Casio is working to develop new production technologies using expertise developed through the manufacture of diverse product lines, enabling cutting-edge products to be produced even more efficiently.

Production Lines for "Tough Movement" Watch Mechanism

In 2008, Casio launched its Tough Movement technology for analog watches. This is a new type of movement with advanced functions such as Multiband 6, which automatically ensures precise timekeeping using standard radio waves from any of six transmitters worldwide. The new movement also provides shock resistance and automatic hand-correction. In order to produce Tough Movement mechanisms with high quality and flexibility, Casio developed its own Analog Block Automatic Assembly Line.



This automatic assembly line is based on completely separate units that can be arranged in any formation, thereby enabling mixed production of multiple models. Casio has also developed a special five-axis robot using linear motors and equipped with multiple heads. This enables several parts to be handled at the same time, which results in high-speed assembly. In the 3-mm-diameter gears that drive the hour, minute, and second hands, 300-micron holes have been inserted to enable the automatic hand-correction function. An assembly device with an image sensor determines the top and bottom sides of the gears, and positions them in the movement based on hole-position detection. The development of high-precision assembly technology like this contributes to a stable supply of Tough Movement mechanisms, which offer a high degree of reliability and performance.

Employee Message

Building Good Labor Relations in Our Plant

Based on the results of a survey of corporate welfare programs that also included other local companies, we have taken new steps to improve our pay system and benefits program. Separate committees were set up to promote CSR activities and employee satisfaction, and each committee works with the union to carry out the needed tasks. For the third year in a row, we have received an award sponsored by the Thai Ministry of Labour's Department of Labor Protection and Welfare, recognizing us as a company with an outstanding human resources system.

Nate-Napa Panyaboon

Department Manager,
Human Resource Department,
Casio (Thailand) Co., Ltd.



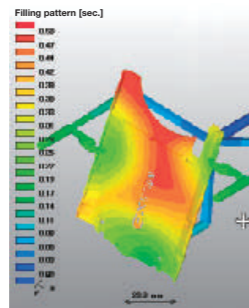
Mold Manufacturing Technology at Yamagata Casio's High-Tech Plant

The high-tech plant at Yamagata Casio Co., Ltd., boasts outstanding manufacturing technology. Many of Casio's most challenging new products were first manufactured at this plant. With its expertise developed through years in manufacturing cutting-edge products that entail a high degree of difficulty, Yamagata Casio has earned the confidence of other companies in a broad range of production fields and now molds plastic parts and manufactures metal molds on commission.

Simulating Mold Manufacturing and Movement

Using 3D design data, Yamagata Casio carries out preliminary computer simulations of mold manufacturing and movement.

With digitized mold design data, virtual testing is carried out on a computer, in order to ascertain things such as the force applied by machine tools during mold processing, the movement of the mold during part manufacturing, and the flow of resin within the mold. This testing enables the company to reduce problems that may occur during actual mold machining and part manufacturing to almost zero, which helps to shorten the manufacturing lead time and increase efficiency.



Lead Times Reduced by Automated Mold Manufacturing

Creating the molds used to manufacture plastic parts requires complicated high-precision machining. In the past, it took as long as 45 days to manufacture a metal mold. Now, Yamagata Casio has automated much of this process. Machining data is first prepared from the 3D design data provided by the design department, and then is input into a machine tool. Through the automation of cutting and electrical discharge machining, a mold can be completed in about 20 days. As a result, the lead time to the start of production has been drastically reduced.

Employee Message

System Development to Support the Best Craftsmanship in the Industry

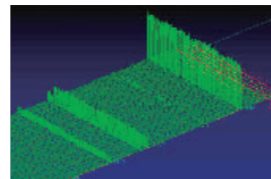
After joining Yamagata Casio, I worked on the creation of mechanisms for automation and streamlining based on computerization. Now I am the leader of a system engineer team that is planning and developing a mold production automation system that will operate at the core of our business. We are designing a process for the efficient machining of complicated molds. I feel very motivated to be working on the frontlines of the best product craftsmanship in our industry.



Tomoka Kiyono
Mold Making & Molding Division,
Yamagata Casio Co., Ltd.

Automatic Mold Diagnosis Using Ultrasound Analysis

Using an acoustic emission (AE) analysis method developed in-house, Yamagata Casio has introduced automatic mold diagnosis into the process for filling a mold with resin. Just like when a skilled railway worker taps on the tracks to listen for problems, the sound produced at the time of molding can be instantly analyzed using digital technology. The AE method can detect without fail even the slightest deformation or crack that may appear in a mold used tens of thousands of times. An alarm sounds before the problem has any impact on quality, thereby preventing any part defects that might arise from the damaged mold.



Training for True Craftsmanship

The company works hard to train employees on its manufacturing technology, in order to develop specialized workers and multi-skilled workers that can ensure a high level of production quality. An incentive system has been established to encourage the acquisition of national certification by workers including plastic molding technicians, electrical discharge machinists, and mold manufacturing technicians. The number of employees that have obtained top-level certifications for multiple technical areas has increased. The company is also encouraging the transmission of technical knowledge from older to younger employees by offering in-house master classes by specially skilled workers.

Employee Message

Obtaining Level 1 Certification for Mold Manufacturing Technicians on My First Try

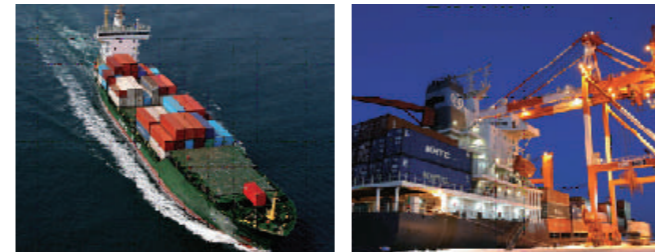
I am in charge of programming for the production of mold parts using machine tools. Having always liked product creation, I wished I could do mold machining just like my skilled colleagues. So I decided to learn actual machining techniques, and took on the challenge of the skill certification exam. While looking after my baby born last year, I learned actual techniques under the guidance of my co-workers. After taking a written exam covering specialized knowledge for mold machining, as well as a practical skills exam involving the creation of a mold from material according to specifications, I was happy to learn that I had passed.



Yoko Konno
Mold Making & Molding Division,
Yamagata Casio Co., Ltd.

Pursuing Integrated Global Logistics

Casio is taking a variety of steps for its transition to truly global logistics, by integrating conventional logistics (sales logistics) used to deliver products to market with materials logistics used for the procurement of parts and materials as well as production logistics for transporting manufactured products to the various sales warehouses. The aim is a seamless system that can operate quickly by facilitating a single flow from procurement, to production, to sales without any waste of resources.



Casio is promoting improvements that benefit customers by integrating this logistics system with initiatives at production sites through a unified IT network. As a specific initiative, the company is promoting the construction of an automated process that can immediately tell customers when products will arrive based on their orders. The delivery date response is created by accessing information on production progress conditions at the plant.

Reducing Logistics Costs

In order to reduce logistics costs, redundant logistics centers have been amalgamated, and the centers have been relocated to sites enabling transportation by the shortest routes. Casio had eight distribution centers in Japan up until 2003, but has since amalgamated them into four centers. Along with the completion of a new office building for Casio Europe GmbH in 2009, four warehouses in Hamburg were combined into two. To maintain lower warehouse operation and delivery costs, operations inside the warehouses have also been totally streamlined using bar codes and handheld terminals.

Even during transportation, costs are being reduced by using low-cost rail and marine transport, as well as more efficient loading methods. A system for worldwide competitive bidding is used for selecting transporters, and shipping companies with particularly high global cost competitiveness are being selected.



Promoting Green Logistics

In order to reduce CO₂ emissions in the logistics process, Casio is promoting the following three action plans.

- Shortening transport distances
Promoting direct shipping to customers from logistics centers in and outside Japan
- Promoting a modal shift*
Actively using modes of transport with low environmental impact such as rail for transport between sites
- Improving loading efficiency and reducing transport volume
Improving the packaging design of electronic dictionaries and musical instruments, and reducing the volume of packaging

* Casio is currently trying out a transportation method that combines rail and ferry for shipping from Zhongshan, China, to Japan. Full-scale implementation of this method is expected to reduce CO₂ emissions by at least 95%.



Full Trade Compliance

Casio is complying with all laws relating to trade, import, and export, including the Japanese Foreign Exchange and Trade Control Law, and the Customs Tariff Law. Casio is striving to increase its corporate value by carrying out initiatives that aim for the full implementation of risk management activities. In February 2009, Tokyo Customs designated Casio as an Authorized Exporter. Casio is recognized as having the ability to carry out the proper customs procedures, thanks to its outstanding security management and compliance systems. This is the Japanese version of the Authorized Economic Operator (AEO) system being promoted in the US and EU. Based on a move to mutual recognition between the Japanese and Western AEO systems, the Japanese customs procedures are being simplified, and the lead time for importing and exporting is expected to become shorter.

Reusing Repair Shipping Packages

Casio Techno Co., Ltd. started to reuse its repair shipping boxes in February 2008. The company sends a flattened box by mail to a customer who requests product repair on the Casio Techno website. The customer assembles the box and sends back the non-functioning product. The company then reuses the box for the same purposes. In addition to the repair of digital cameras and electronic dictionaries, as well as the replacement of watch batteries, Casio Techno also began reusing boxes for its watch repair service in February 2009. These specially designed boxes have resulted in a sharp decline in damage to products caused by impact during shipping. Moreover, since they are just the right size for the intended products, they do not contain any excess packing material and have lower environmental impact.



Building Strong Partnerships

Socially Responsible Procurement at Casio

Casio has established Procurement Policies in order to execute its social responsibility to conduct fair and equitable transactions throughout the supply chain. The policies cover matters including legal compliance, respecting human rights, labor, safety, and health, as well as environmental protection and information security. Casio constantly improves its socially responsible procurement by obtaining the understanding and support of suppliers for the policies and building strong partnerships.

Procurement Policies

Casio aims to fulfill its social responsibilities, including compliance with relevant laws and social norms, and protection of the environment, through fair and equitable transactions throughout the supply chain by strengthening partnership with suppliers.

1. Fair and equitable transactions

Casio carries out fair and equitable transactions by providing equal opportunities to all suppliers (and candidates) in and outside Japan in accordance with its internally established procedures.

2. Compliance with laws and social norms

Casio's procurement activities comply with all relevant laws, social norms, standards and treaties worldwide, including the protection of human rights, the prohibition of child labor, forced labor and discrimination, and respect for freedom of association, the right to associate, and the right to collective bargaining, as well as ensure that absolutely no contact is made with organized criminal elements. Therefore, Casio requires its suppliers to observe the same legal and social requirements.

3. Environmental protection

Casio helps to protect the global environment through environmentally friendly procurement, which is based on the Casio Environment Charter and Fundamental Policies, in cooperation with suppliers.

4. Strengthening partnership with suppliers

Casio builds up relationship of trust with its suppliers through reciprocal efforts, such as merging and complementing mutual technological development abilities, supply chain cooperation, compliance with laws and social norms and protection of the global environment, which will benefit both parties.

5. Policies on supplier selection and transaction continuation

Casio initiates and continues transactions with suppliers based on comprehensive evaluation criteria, which include compliance with laws and social norms, environmental protection, proper information security, respect for intellectual property, sound and stable corporate management, superior technological development ability, right price and quality, stable supply capabilities and electronic transaction systems.

6. Securing right price and quality

Casio endeavors to secure right price and quality in order to provide its customers with stable supply of optimal products, which ensures that Casio gains the full confidence of customers around the world.

7. Prohibition of personal-interest relationships

Casio does not allow any employees to have personal-interest relationships with any suppliers.

Fulfilling Social Responsibilities Together with Suppliers

In order to ensure compliance with the Procurement Policies together with its suppliers, Casio has established the Supplier Guidelines summarized at right. All of Casio's suppliers in Japan and elsewhere have agreed to these guidelines to help Casio fulfill its social responsibilities.

Casio is also managing its supply chain more successfully by introducing a regular monitoring system that ensures that these guidelines are properly fulfilled.

Disseminating the Supplier Guidelines

In fiscal 2009, Casio again held briefings on its Procurement Policies in Southern China and Thailand. The briefings were attended by a large number of suppliers, and proved very successful in building support for the Policies and Supplier Guidelines. In order to raise awareness of these policies and guidelines among even more stakeholders, they have been posted on the Casio website.



Briefing in Thailand on the Procurement Policies

Supplier Message

Panasonic Endorses Casio's CSR Procurement System

As a supply chain partner, Panasonic Corporation understands and agrees with the Casio Procurement Policies, and is actively participating in the improvement of Casio's CSR performance. We comply with all the CSR requirements outlined by Casio, and strive to maintain this status.



Hirokuni Okada

Director
Eastern Japan Industrial Marketing & Sales Office,
Corporate Industrial Marketing & Sales Division,
Panasonic Corporation

Supplier Guidelines (Content Outline)

Casio is provided with materials by so many suppliers for its global business operation. Under the situation, we believe that it is of primary importance for Casio to fulfill its social responsibilities throughout the supply chain including its suppliers. In order to accomplish this objective, Casio would like to ask all of its suppliers to implement the following requirements:

1. Compliance with laws and social norms

Casio gains full confidence of customers around the world not only through providing optimal products but also through complying with all relevant laws, social norms, standards and treaties worldwide, including the protection of human rights, the prohibition of child labor, forced labor and discrimination, and respect for freedom of association, the right to associate, and the right to collective bargaining, as well as ensuring that absolutely no contact is made with organized criminal elements. Therefore, Casio requires its suppliers to observe the same legal and social norms in their own areas or countries.

2. Environmental protection

Casio contributes to building sustainable societies by providing environmentally friendly products. In this respect, Casio wants to promote environmental activities in cooperation with its suppliers to implement the same environmental activities for the materials or parts comprising the product in their local process of procurement or production... (remainder omitted)

3. Proper information security

Casio requests its suppliers to keep the know-how or confidential information that has been obtained through business with Casio or the same that is consigned to Casio by third parties under strict management to prevent any possible leakage thereof.

4. Respect for the intellectual property

Casio respects and protects the intellectual property of other parties as well as its own in order to prevent unfair or illegal usage or infringement thereof. Casio explicitly requests its suppliers to implement the same level and nature of strict management with respect to this issue.

5. Sound and stable corporate management (details omitted)

6. Superior technological development abilities (details omitted)

7. Securing right price and quality (details omitted)

8. Securing stable supply (details omitted)

9. Ability to deal with electronic transaction systems

As it is very important to Casio and its suppliers for efficient business transactions to exchange the necessary business information quickly and accurately, Casio would like to make sure, at the initiation of business, that suppliers are able to adopt the electronic transaction system... (remainder omitted)

10. Prohibition of personal-interest relationships

Procurement activities are the transactions done between the corporations, and, therefore, Casio prohibits its employees from having personal-interest relationships with suppliers. In case suppliers should be confronted with Casio employee's inappropriate doings, please kindly inform Casio about it... (remainder omitted)

Managing Guideline Fulfillment

In February 2009, a survey* entitled the 2nd Questionnaire on Corporate Social Responsibility (CSR) Fulfillment was sent to 363 principal suppliers in Japan. The questionnaire began in the previous fiscal year and is being carried out jointly by Japanese production companies in the Casio Group. This year there was an extremely high response rate of 85% (310 companies), revealing once again the strong commitment of suppliers to CSR fulfillment. This time a question about ensuring absolutely no contact with organized criminal elements was added to the section on fair transactions and ethics, in light of current social conditions in Japan.

The situation for supplier CSR initiatives was ascertained from the questionnaire responses, and the analysis results were provided as feedback to all suppliers, including those that did not respond. Along with the feedback, Casio provided a simple explanation of the CSR procurement approach that it is aiming for, and asked the suppliers to cooperate with Casio to improve the level of its CSR fulfillment.

* The questionnaire was carried out using a Supplier Checklist for CSR Procurement based upon the Guidebook for Supply Chain Implementation of CSR Procurement published by the Japan Electronics and Information Technology Industries Association (JEITA). It covered: (1) Human rights and labor conditions, (2) health and safety, (3) the environment, (4) fair transactions and ethics, (5) quality and consumer safety, (6) information security, and (7) social contribution.

Activities of the Compliance Committee on the Subcontract Act

Casio has established a Compliance Committee on the Subcontract Act which includes group companies, and is striving to ensure all transactions comply with the Act against Delay in Payment of Subcontract Proceeds, etc. In particular, employees that deal directly with suppliers and outsourcers are provided with the necessary knowledge through in-house seminars and classes sponsored by the relevant government authorities.

In fiscal 2009, 3,243 Casio employees attended in-house seminars, and 55 people also participated in classes sponsored by the Japan Fair Trade Commission and by the Small and Medium Enterprise Agency. This training helped to raise compliance awareness and provide employees with the necessary knowledge. Further understanding was promoted through in-house textbooks that feature more concrete cases relating to Casio operations, and by studying actual subcontract transaction situations, rather than just learning the subcontractor obligations and the prohibited actions.

In addition, the committee obtains the latest information from government websites and email notification services, and sends the information directly to committee members. The news is also posted on the committee's website, and shared with the entire group.

In offices where subcontract transactions are handled, independent audits are carried out on an ongoing basis. Casio confirms that proper, compliant transactions are executed, by inspecting the document record of the entire series of transactions from ordering to payment. The goal is to ensure that no problems occur. Special priority is given to inspecting transactions of media content and other intangibles, in order to maintain their legitimacy.

Casio will continue to promote understanding of Japan's Subcontract Act among its employees, and work to strengthen its system for even better compliance.



Subcontract Act compliance webpage